

Title (en)
Method for making metal oxides

Title (de)
Verfahren zur Herstellung von Metalloxidpulvern

Title (fr)
Procédé de préparation d'oxydes de métaux

Publication
EP 1688394 A2 20060809 (DE)

Application
EP 05025501 A 20051123

Priority
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Abstract (en)
Preparing metallic oxide powders having Brunauer-Emmett-Teller (BET) surface, comprises reacting an aerosol with oxygen and separating gaseous material powder, where at least one aerosol raw material and at least one atomization gas are provided via a nozzle and a multi-material nozzle, respectively, the volume related average diameter of the aerosol is 30-100 μm and the number of aerosol drops that are larger than 100 μm amounts up to 10%. Preparation of metallic oxide powders having Brunauer-Emmett-Teller (BET) surface of at least 20 m^2/g comprises reacting an aerosol with oxygen in a reaction area at above 700[deg]C and separating gaseous material powder, where at least one of aerosol raw material, in liquid form or as solution, is provided via a nozzle and at least one atomization gas is provided via a multi-material nozzle, the volume related average diameter D 30 of the aerosol is 30-100 μm and the number of aerosol drops, which are larger than 100 μm , amounts up to 10%, related to the total number of the drops. An independent claim is included for the metallic oxide powder obtained by the method.

Abstract (de)
Verfahren zur Herstellung eines Metalloxidpulvers mit einer BET-Oberfläche von mindestens 20 m^2/g durch Reaktion eines Aerosols mit Sauerstoff in einem Reaktionsraum bei einer Reaktionstemperatur von mehr als 700 °C und anschließender Abtrennung des erhaltenen Pulvers von den gasförmigen Stoffen, wobei - das Aerosol durch Verdüsen wenigstens eines Ausgangsmaterials, als solches in flüssiger Form oder in Lösung, und wenigstens eines Zerstäubungsgases mittels einer Mehrstoffdüse erhalten wird, - der volumenbezogene, mittlere Tropfendurchmesser D 30 des Aerosols 30 bis 100 μm ist und - die Anzahl der Aerosoltropfen, welche größer als 100 μm sind, bis zu 10% beträgt, bezogen auf die Gesamtanzahl der Tropfen. Mittels dieses Verfahrens erhältliches Metalloxidpulver.

IPC 8 full level
C01G 1/02 (2006.01); **B01J 23/10** (2006.01); **B01J 37/08** (2006.01); **B82Y 30/00** (2011.01); **C01B 13/20** (2006.01); **C01B 13/34** (2006.01); **C01F 17/235** (2020.01); **C01G 25/00** (2006.01); **C01G 25/02** (2006.01); **C01G 99/00** (2010.01); **C09G 1/02** (2006.01)

CPC (source: EP KR US)
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Citation (applicant)
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